

REMARKS

The Supplemental Examiner's Answer of April 30, 2008 has been carefully considered. Reconsideration of this application, as amended above under the concurrently-filed Request for Continued Examination (RCE), is respectfully requested.

Turning now, to the Supplemental Examiner's Answer, claim 1 of the instant application is amended to clarify that the circulation system continuously circulates the liquid containing dissolved ozone through a passageway that is pressurized and regulated by a pressure regulator, the passageway providing the liquid containing dissolved ozone to the operatory unit. Claim 30 has been amended to place it in independent form. New independent claim 32 has been added by amendment.

Remaining claims 1-5 and 7-31 are presently rejected under 35 USC §103(a) as being unpatentable over Contreras in view of Burris '993. Claims 1-5, 7-16, 18-29 and 31 also remain rejected under 35 USC §103(a) as being unpatentable over Engelhard et al. in view of Burris '993.

Considering the rejection of claims 1-5 and 7-31 under 35 USC §103(a) as being unpatentable combination of Contreras in view of Burris '993, Applicants contend that, at best, the asserted combination fails to teach the limitations of amended claim 1. In particular the combination fails to teach a circulation system that continuously circulates liquid containing dissolved ozone to the operatory unit. Contreras is believed to teach the opposite, by stating "water flow sensor 20 to activate (turn on and off) the pump/motor 10 upon demand." (col. 3, lines 47-48). Such a teaching, in combination with a "safety pressure relief valve 24 to override any potential excess pressure on the line with a discharge hose 25 feeding back to the storage tank 2 indicates that the liquid is not re-circulated because if it were, pressure applied to the line at relief valve 24 would not be "relieved" by a connection to pressurized tank 2 through hose 25. Accordingly, the teachings of Contreras and Burris '993, both alone and in combination are believed to be overcome by the amendments presented herein. Applicants respectfully traverse the rejection in light of the amendments and seek the Examiner's indication of an allowance of amended claim 1.

Furthermore, the asserted combination fails to teach a separation system that separates undissolved gas from the ozonated liquid prior to circulating the ozonated liquid through the circulation passageway, and vents said gas to atmosphere via a reducing material. Applicants again urge that neither of the patents relied upon expressly indicate such a feature. In particular, Contreras teaches a flexible tube 26 that captures and reuses any excess ozone, thus leaving no waste. (col. 4, lines 11-15; underlining added). Such an arrangement does not vent to atmosphere via a reduction material as claimed, and in fact inserting such a vent to replace, or be put in-line with, the tube would preclude the capture and reuse taught by Contreras. Thus, the operation of the Contreras system would require modification in such a manner as to preclude a finding of obviousness. Accordingly, claim 1 is further submitted to be patentably distinguishable over the combination of Contreras in view of Burris '993.

Amended independent claim 30 is also believed to be patentably distinguishable over Contreras in view of Burris '993 as neither is believed to disclose the combination of elements as now set forth in the independent claim – particularly a device control system that operates in response to a liquid level sensor. As for the Examiner's assertion of inherency, Applicants maintain that the Examiner fails to establish the inherency (i.e., necessity) of the limitations set forth in claim 30 based upon Contreras' teachings, nor the specific relationships of such limitations. Accordingly, the rejection as it may apply to amended independent claim 30 is respectfully traversed.

For purposes of brevity, further arguments in traversal of the rejection applied to the remaining dependent claims (1-5, 7-29 and 31) are not presented herein, but such claims are urged to be patentably distinguishable for the reasons previously set forth relative to claim 1 from which they depend. Applicants reserve the right to further amend or present arguments in favor of patentability of the dependent claims in a subsequent response or on appeal.

Claims 1-5, 7-16, 18-29 and 31 continue to be rejected under 35 USC §103(a) as being unpatentable over Engelhard et al. in view of Burris '993. This rejection is also respectfully traversed. Engelhard is not believed to teach or suggest an ozone mixing system, or a circulation system that continuously circulates the liquid containing dissolved ozone through a pressurized liquid circulation passageway

connected to provide liquid containing dissolved ozone to the operatory unit, said circulation system including a pressure regulator to maintain positive pressure in the circulation passageway. As depicted in FIG. 1 of Engelhard, for example, it is not clear where Engelhard is alleged to teach mixing. Nor is it clear where Engelhard teaches that the system either discharges or circulates via a pump 90. Moreover, no teaching is found to indicate continuous circulation, or the use of a pressure regulator. For the reasons noted above, Burris '993 is not believed to supply the noted deficiencies noted herein relative to Engelhard. As Engelhard and Burris '993 each fail to teach the mixing and circulation limitations found in amended independent claim 1, they are also urged to be patentably distinguishable over the combination.

Again for purposes of brevity, further arguments in traversal of the remaining dependent claims (1-5, 7-16, 18-29 and 31) are not presented herein, but such claims are urged to be patentably distinguishable for the reasons previously set forth relative to claim 1 from which they depend. Applicants reserve the right to further amend or present arguments in favor of patentability of the dependent claims in a subsequent response or on appeal.

In view of the foregoing remarks and amendments, reconsideration of this application and allowance thereof are earnestly solicited. In the event that additional fees are required as a result of this response and Request for Continued Examination, including fees for extensions of time, such fees should be charged to USPTO Deposit Account No. 50-2737 for Basch & Nickerson LLP.

In the event the Examiner considers personal contact advantageous to the timely disposition of this case, the Examiner is hereby authorized to call Applicant's attorney, Duane C. Basch, at Telephone Number (585) 899-3970, Penfield, New York.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'DCB', followed by a long horizontal flourish.

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